
BUSINESS CONTINGENCY PLAN

(Introduction & Team Overview)

I. INTRODUCTION

IA. WHAT IS THE BUSINESS CONTINGENCY PLAN (BCP)

More than anything else, the BCP is a living document. It requires maintenance as the applications and technologies we deploy increase in sophistication and complexity. Continued changes in the scope and depth of services provided by IST must continually be reflected in the contents of the BCP.

Its design will reduce the confusion that is inevitable with a disaster; and ensure necessary information and materials for recovery will be available. Identifying requirements and documenting roles and responsibilities before the disaster (and its confusion) occurs will provide organizational structure and well-defined teams throughout the recovery effort. Establishing priority of actions and events, in advance, improves decision making processes and supports personnel who are quite possibly fulfilling unfamiliar roles in a challenging environment. Additionally, it identifies anticipated activities for advance knowledge and planning by IST staff and customer departments. This establishes realistic expectations and promotes the teamwork essential to the successful recovery process.

A Business Contingency Plan is a guide to ensure the “Business Continuity” of IST and our customers’ automated applications within documented guidelines. The creation of a BCP is, in itself, a preparatory function, and displays preparedness to our staff, our customer departments, and our citizens.

I.B. HOW THE PLAN IS STRUCTURED

PHASED APPROACH

This plan involves a phased approach to disaster recovery. There are three phases:

- **PREPARATION PHASE -**
This phase identifies tasks required to be prepared for recovery. In this phase, critical information is gathered and stored off-site. Also, critical files are identified and copies stored off-site. The success of the plan when activated, depends upon completion of these activities.
- **RECOVERY PHASE -**
This phase occurs just after a disaster has occurred. This phase involves damage assessment, hardware and software restoration, and other task required to restore the execution of appropriate applications from an alternate processing site.
- **RESTORATION PHASE -**
In this phase, full service delivery is restored.

TEAMS

Disaster recovery activities will be performed by several teams. Each team has defined responsibilities and functions for each phase. The plan identifies a Team Leader, Alternate Team Leader, and team members for each team. The Resumption Management Team is responsible for the execution and monitoring of the entire plan. All teams report to this team.

FLEXIBILITY

The Recovery and Restoration phases of the plan are designed to be flexible depending on the scope of the disaster. If a disaster should occur, the Resumption Management Team will evaluate the disaster. Based upon its evaluation, only necessary teams will be activated. The plan addresses a “worst-case scenario”; Team Leaders will only perform assigned tasks as required based upon scope of the disaster.

I.C. HOW TO USE

The Plan is designed to serve as both a guide and a checklist. Each section identifies potential issues, considerations, requirements, and tasks in priority order. This is to establish, in advance, the order in which resources should be allocated to and by each team.

Each Team Leader must review their team's responsibilities and tasks in all sections of the Plan annually and provide appropriate additions/deletions/modifications to the Resumption Management Team for evaluation. The Resumption Management Team Leader must ensure the entire Business Contingency Plan is reviewed, updated, and tested annually.

The Recovery and Preparation Phases identify potential tasks and considerations relevant to each team. Again, they are recorded in order of importance. Each Team Leader must evaluate these items under each disaster declaration and establish their relevancy to the situation at hand. This will enable teams to quickly remove an item not relevant to the disaster, ensuring resources are only allocated as required and appropriate. Recovery Team Leaders will also use the Plan to notify the Resumption Management Team of resource shortages preventing completion by their team of tasks required by the Plan.

I.C.1 How To Use The Business Contingency Plan Before A Disaster

Each Team Leader (as identified in the Plan) is responsible for tasks assigned to their team in the Preparation Phase being complete at all times. The Resumption Management Team Leader is responsible to ensure that all tasks documented in the Preparation Phase are completed and maintained as required at all times.

I.C.2 How To Use The Business Contingency Plan During A Disaster

The Resumption Management Team Leader will evaluate the situation and declare a disaster as required. The Resumption Management Team will then use the Plan, as a guideline to identify and activate required Teams. The Resumption Management Team Leader will then use the entire plan as a guide and checklist to ensure Team activities match requirements and priorities of the disaster and the Business Contingency Plan for this phase.

Each Recovery Team Leader will use the Recovery Phase documentation in the Plan for their team as a pre-prioritized checklist. It will aid their identification of required tasks for their team under this disaster and facilitate assignment of team resources appropriately. Recovery Team Leaders will also use the Plan to notify the Resumption Management Team of resource shortages preventing completion by their team of tasks required by the Plan and Recovery activities.

I.C. HOW TO USE

I.C.3 How To Use the Business Contingency Plan For Recovery After The Disaster

The Resumption Management Team Leader will use the Restoration Phase of the Plan as a guide and checklist to ensure Team activities match requirements and priorities of the disaster and the Business Contingency Plan for this phase as with other phases of the document. Each Recovery Team Leader will use the Restoration Phase documentation in the Plan to establish their team's responsibilities in this phase. As with other phases, this section of the Plan is designed to double as a checklist for all Recovery Team Leaders. Task assignments are listed in priority order. Recovery Team Leaders will also use the Plan to notify the Resumption Management Team of resource shortages preventing completion by their team of tasks required by the Plan and restoration activities.

I.D PURPOSE AND GOALS

PURPOSE

The purpose of this plan is to ensure the automated functions critical to the County and Schools are reasonably continued during a disaster. Planning for a disaster is not the sole responsibility of IST, but must include all departments with critical business functions.

GOAL

The goal of this plan is:

- To define roles, responsibilities, and specific actions to be taken by IST in case of a disaster at the main data processing site. This involves Enterprise Computer Resources (including mainframe, internet, and server based applications), local area networks, other computers, voice communications, data communications, and other functions whose operations are under direct control of IST.

I.E SCOPE OF BUSINESS CONTINGENCY PLAN

A. The following types of hardware will be included in the BCP.

Under Direct Control Of IST

- Mainframe
- LAN/WAN
- Other (Large Systems)
- Data Communications
- Voice Communications

B. The following applications will be included in the BCP

- County Applications
- School Applications
- Combined County and School Applications
- State Applications

C. Management will be notified in writing of the scope of the BCP. Notification will be given to:

- County Administrator
- All Deputy County Administrators
- Constitutional Officers
- Chiefs
- Directors
- Superintendent of Schools

I.F DEFINITIONS

The following definitions apply to the BCP.

DISASTER -	A prolonged interruption in automated technology services because any business group is unable to conduct normal business functions from their facility.
DATA CENTER -	Any facility used to house all centralized hardware and software components.
PREPARATION PHASE -	The phase of the BCP identifying tasks necessary to maintain a state of readiness for disaster recovery to minimize the effects of and plan for the recovery from a disaster.
RECOVERY PHASE -	The phase of the BCP identifying and prioritizing tasks required to restore critical and important application service delivery.
RESTORATION PHASE -	The phase of the BCP identifying and prioritizing tasks to maintain normal service for critical and important applications, to restore service at the new (or repaired) site, and to restore suspended applications.
BUSINESS FUNCTION -	Any automated activity performed on a mainframe, server, or desktop platform.
APPLICATION -	A group of related business functions.

I.G ASSUMPTIONS

The following assumptions have been made.

- The off-site materials are not harmed during the disaster.
- Mobile trailers will be used for temporary relocation of the data center.
- Mobile trailers will be located to provide strategic access to existing fiber network.
- All preparation phase activities have been completed by responsible parties.
- Some applications may not be run from the alternate site, and may be suspended until a permanent site has been built. These applications will be identified, and the customers notified.
- From the time a disaster occurs until full services have been restored at the alternate processing site, all normal applications development activities will be suspended.
- Replacement hardware and software will be available from the vendors in a reasonable time.

I.H BUSINESS IMPACT ANALYSIS - OVERVIEW

Business Impact Analysis is a process to objectively rank all applications ensuring recovery of the most critical applications first. Five (5) categories considered in the review process are: Longest Tolerable Outage Period During Peak Processing Cycle, Health & Safety, Customer Service, Visibility, Business & Financial Impacts. Each category is assigned a weighted value according to its importance. Two (2) forms have been developed to facilitate the application analysis. They are the Criticality Ranking Valuation Table and the Criticality Ranking Worksheet.

The Criticality Ranking Valuation Table assigns impact values for each category identified above per criteria identified in the table by level of impact. For each business function an impact value is assigned to every category from the definitions in this table. This form also identifies weighted values assigned to each category.

A Criticality Ranking Worksheet is completed for each application in the Business Contingency Plan. It records the impact values assigned to each business function supported by the application. The most critical impact value for each category is used as the basis for calculating the impact score for that category. The impact value for each category is identified through the following questions:

Outage Period	How many days can this business function be suspended during its peak business cycle?
Health & Safety	What level of Health & Safety risks are created by the suspension of this business function for thirty (30) days during its peak cycle?
Customer Service	How many customers will potentially be impacted by the suspension of this business function for thirty (30) days during its peak cycle?
Visibility	What level of visibility or exposure is likely to be attained by the suspension of this business function for thirty (30) days during its peak cycle?
Business & Financial	What is the potential impact to Chesterfield County Government or Chesterfield County School revenue; or to the Chesterfield County business community due to the suspension of this business function for thirty (30) days during its peak cycle?

The most critical impact value for each category is multiplied by the assigned weighting factor to establish the minimum impact score for each category. The impact scores are then added to calculate the Total Impact Score for that application.

I.H BUSINESS IMPACT ANALYSIS - OVERVIEW

Application dependencies are also identified with the affiliated Total Impact Scores for each. The Lowest Total Impact Score is then used to establish the Criticality Score for the application.

The completed Criticality Ranking Worksheets for all IST mainframe applications are contained in Appendix A and criticality ranking worksheets for server applications are in Appendix C. They are listed in alphabetical order by application name. A summary ranking of mainframe applications is contained in Section III. A summary ranking of server applications is contained in Section IV. In this section the applications are identified in order by assigned criticality ranking. Section III is designed and structured as a guide for the Resumption Management Team to establish the order for restoring applications. Final decisions for order of application restoration will be determined by the Resumption Management Team at the time of recovery based upon existing circumstances.

BUSINESS IMPACT ANALYSIS

Loss Impact Identification

Application/System: _____

	Business Function	Longest Tolerable Outage Period During Peak Processing	Health & Safety	Customer Service	Embarrassment	Business & Financial
1						
2						
3						
4						
5						
6						

Weight Equal	25	35	20	10	10
Minimum Impact Score					
Total Impact Score					

Dependencies				
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Recommended Criticality Tier	
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Loss Impact Valuation Table

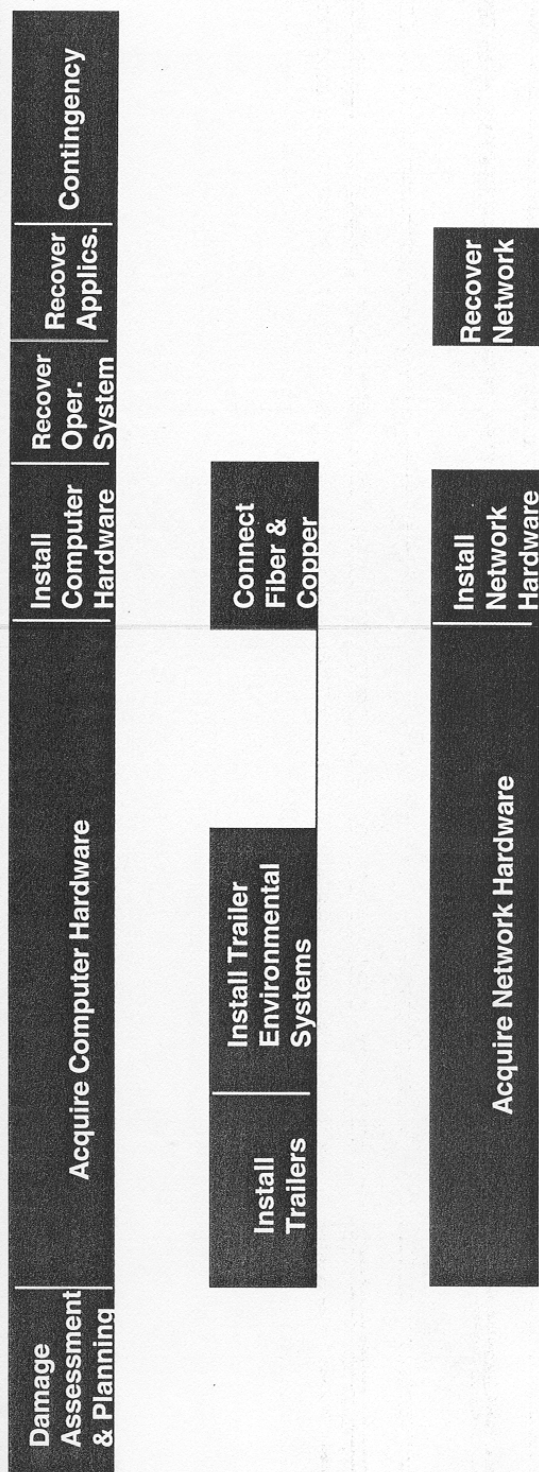
Impact Value	Longest Tolerable Outage Period	Health & Safety	Customer Service Impact	Visibility	Business/Financial Impact
1	0 to 1 Day	Loss Of Life	Over 200,000	National Press	Unrecoverable Loss Of Revenue GT. 500,000 Or Permanent Loss Of Businesses.
2	2 to 5 Days	Life Threatening Injury	50,000 To 200,000	Local Press	Unrecoverable Loss Of Revenue LT. 500,000 Or Severe Impact To Existing Business Community.
3	6 to 14 Days	Serious Injury	10,000 To 50,000	County Admin.	Delay Of Revenue GT. 500,000 Or Negatively Impacting Ability To Acquire New Business.
4	15 to 20 Days	Major Exposure To Unsafe Environment	1,000 To 10,000	Dept. Admin.	Delay Of Revenue LT. 500,000 Or Minor Impact To Existing Business Community.
5	30 or More Days	No Impact, Or Minor Exposure To Unsafe Environment	0 To 1,000	Little Or None	Little Or No Revenue Loss/Delay Or No Impact To Existing Business Community.

Weighting	25	35	20	10	10
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Critical Application Recovery Projections

Days

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30



* Based on best case scenario and assumed availability

II. Team Overview

II. TEAM OVERVIEW

Each phase of disaster recovery (Preparation, Recovery, and Restoration) will be completed by appropriate teams. An overview of each team, identifying Team Members (for each team, the team leader is listed first and the alternate team leader is listed second). Mission Statement, and Recovery Strategy Overview, follows:

- **Activities are to be accomplished by the following teams**

- A. Resumption Management
- B. Computer Operations
- C. Systems Software - Mainframe / Mini
- D. Microcomputer Hardware / Software
- E. Data Communications
- F. Applications Recovery
- G. Administration
- H. Facilities
- I. Voice Communication
- J. Human Resource

See Appendix B for the IST organization structure of teams during plan activation.

II.A RESUMPTION MANAGEMENT TEAM

TEAM MEMBERS

Director IST (Team Leader)
Assistant Director (Alternate Team Leader)
Application Systems Manager
Web Services Manager
Risk Manager
IST Business Contingency Coordinator

MISSION STATEMENT

Utilizing BCP, prioritize and identify necessary actions to ensure recovery efforts meet requirements.

RECOVERY STRATEGY OVERVIEW

Provide leadership necessary to restore automated information technology applications and processes from any disaster occurrence that interrupts their delivery as established. At a minimum this includes:

- Formal declaration of a disaster and initiation of BCP actions.
- Engaging / disengaging recovery teams as necessary and appropriate.
- Acquiring or re-allocating staffing or other resources as required.
- Providing guidance and direction to all recovery teams through restoration of normal business services and conditions.
- Establish / modify work assignments, schedules, and priorities.
- Coordinate communications with other departments and elected officials.
- Budgetary control and tracking.
- Ensure plan preparedness, review, and testing.

II.B COMPUTER OPERATIONS TEAM

TEAM MEMBERS

Production Services Manager
Production Services 1st Team Leader
Production Services 2nd and 3rd Team Leaders
Production Control Coordinator
Operations Technical Analyst

MISSION STATEMENT

Installation and operational support for all central site processing platforms to ensure recovery and delivery of required on-line and batch processing services. Maintenance of necessary controls to ensure integrity of processing and data.

RECOVERY STRATEGY OVERVIEW

- Data Center computer operations (mainframe, mini, micro).
- Hardware installation (mainframe and mini).
- Execution of back-up and restore procedures (mainframe, mini, and micro).
 - Data control (mainframe, mini, and micro).
- Report distribution (mainframe, mini, and micro).
- Tape Library Management. (mainframe, mini, and micro).
- Production job scheduling (mainframe, mini, and micro).

II.C SYSTEMS SOFTWARE - MAINFRAME/MINI-TEAM

TEAM MEMBERS

Lead Systems Programmer
Senior Data Base Administrator
Systems Programmers (All)
Data Security Administrator

MISSION STATEMENT

To install and maintain all operating system and security software and other products necessary for a production operations environment on all mainframe and mini platforms.

RECOVERY STRATEGY OVERVIEW

- Data security (Mainframe and Mini).
- System Software - Define back-up requirements (Mainframe and Mini).
- System Software - Restore (Mainframe and Mini).
- System Software - Maintain (Mainframe and Mini).

II.D MICRO COMPUTER HARDWARE/SOFTWARE TEAM

TEAM MEMBERS

Desktop Services Manager
Lead Microcomputer Analyst
Microcomputer Analyst (all)

MISSION STATEMENT

To acquire, install, and maintain all microcomputer hardware and software.

RECOVERY STRATEGY OVERVIEW

- Hardware - Purchase (micro).
- Hardware - Installation (micro).
- System Software - Define back-up requirements (micro).
- System Software - Restore (micro).
- System Software - Maintain (micro).
- Data - Define back-up requirements.
- Data - Restore (micro).
- Data Security (micro).

II.E DATA COMMUNICATIONS TEAM

TEAM MEMBERS

Senior Network Analyst

Production Services Manager

Network Analyst (all)

Systems Programmer Supporting Communications Software Products

Communication Network Services Manager

MISSION STATEMENT

To restore and maintain all data communications functions, to include, hardware, software, and equipment.

RECOVERY STRATEGY OVERVIEW

- Restore and maintain data communications software products.
- Coordinate purchase, installation, and maintenance of data communications components.
- Restore and maintain data communications services.

II.F APPLICATIONS RECOVERY TEAM

TEAM MEMBERS

Application Systems Manager
Web Services Manager
Application Team Leaders (All)
Operations Technical Analyst

MISSION STATEMENT

To provide programming support necessary to recover and maintain customer application systems.

RECOVERY STRATEGY OVERVIEW

- Data - Define back-up requirements (mainframe, mini, micro).
- Assist in restoration of application programs and data.
- Make program modifications as required.
- Provide special support and assistance to customers.
- Assist Computer Operations Team to ensure data integrity and control.

II.G ADMINISTRATION TEAM

TEAM MEMBERS

Administrative Assistant
Procurement Administrator
Secretary
Sr. Office Assistant
Help Desk Technicians (all)

MISSION STATEMENT

To provide clerical and administrative services to all teams, perform purchasing functions, and provide help desk support.

RECOVERY STRATEGY OVERVIEW

- Purchasing.
- Coordinate necessary transportation and lodging.
- Records management.
- Office equipment and supplies.
- Clerical support.
- Help Desk support.

II.H FACILITIES TEAM

TEAM MEMBERS

Assistant Director

Production Services Manager

MISSION STATEMENT

To identify, acquire, and maintain necessary office space and furniture to house IST staff and equipment.

RECOVERY STRATEGY OVERVIEW

- Coordinate purchase of office furniture and fixtures.
- Coordinate acquisition and installation of trailers at alternate site.
- Coordinate occupancy at alternate site.
- Coordinate construction and move to new or repaired facilities.
- Coordinate removal of trailers.

II.I VOICE COMMUNICATIONS TEAM

TEAM MEMBERS

Voice Services Manager

Automation Analyst

Customer Service Technicians (ALL)

MISSION STATEMENT

To restore and maintain voice communications services for all County departments and locations.

RECOVERY STRATEGY OVERVIEW

- Restore and maintain voice communications.
- Emergency Communications
- Voice Mail
- Bulletin Boards
- Telephone Directories
- County Operator
- Intra County Service
- Long Distance and Local Service
- Billing
- Phone Cards
- Hardware and Software

II.J HUMAN RESOURCE TEAM

TEAM MEMBERS

Director of IST

Assistant Director

MISSION STATEMENT

To identify and evaluate staffing requirements to ensure adequate staff and skill levels necessary to complete recovery process; and to maintain communications with employees and Public Affairs.

RECOVERY STRATEGY OVERVIEW

- Assess staffing, identify available resources, and analyze requirements.
- Interface with County Office of Public Affairs and IST staff.
- Recruitment.